

# Addition of New BMP Stat Types

draft-ietf-grow-bmp-bgp-rib-stats-03

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# Introduction

- **BMP RFC7854 defines several different BMP statistics types to observe interesting events that occur on the router.**
- **As the BGP protocol continues to expand, more and more functional features are implemented through the BGP protocol, which adds more event information to monitor these functional features.**
- **The current types are incomplete and cannot meet the requirements of observation.**
- **This document defines some statistics types for BMP statistics message to update RFC 7854 for enriching events of interest to routers.**

# Overview

The content of draft-liu-grow-bmp-stats-reports-00 have been merged into draft-ietf-grow-bmp-bgp-rib-stats-03 and made modifications based on comments.

## RIB-IN

routes in Adj-RIBs-In-Pre-Policy
routes in per-AFI/SAFI Adj-RIBs-In-Pre-Policy
routes in Adj-RIBs-In-Post-Policy
routes in per-AFI/SAFI Adj-RIBs-In-Post-Policy
routes in per-AFI/SAFI rejected by inbound policy
routes in per-AFI/SAFI accepted by inbound policy
routes in per-AFI/SAFI selected as primary route
routes in per-AFI/SAFI selected as backup route
routes in per-AFI/SAFI suppressed by configured route damping policy
routes in per-AFI/SAFI marked as stale by LLGR
routes left until reaching the received route threshold
routes in per-AFI/SAFI left until reaching the received route threshold

routes left until reaching the license-customized route threshold
routes in per-AFI/SAFI left until reaching the license-customized route threshold.
routes rejected by exceeding the length threshold of as-path
routes in per-AFI/SAFI rejected by exceeding the length threshold of as-path.
routes invalidated by RPKI validation
routes validated by RPKI validation
routes not found by RPKI validation

## RIB-OUT

routes in per-AFI/SAFI rejected by outbound policy
routes refused to be sent by exceeding the length threshold of as-path.
routes in per-AFI/SAFI exceeded the length threshold of as-path.
routes invalidated by RPKI validation
routes validated by RPKI validation
routes not found by RPKI validation

draft-liu-grow-bmp-stats-reports-00



Merged into

draft-ietf-grow-bmp-bgp-rib-stats-03

# Proposal(RIB-IN)

- **Type = TBD12: (64-bit Gauge) Number of routes left until reaching the received route threshold.**
- **Type = TBD13: (64-bit Gauge) Number of routes in per-AFI/SAFI left until reaching the received route threshold.**
- **Type = TBD14: (64-bit Gauge) Number of routes left until reaching the license-customized route threshold.**
- **Type = TBD15: (64-bit Gauge) Number of routes in per-AFI/SAFI left until reaching the license-customized route threshold.**

Since the license-customized route threshold is vendor specific, this type value (TBD14/TBD15) SHOULD use enterprise-specific TLV encoding as described in Section 3.3 of [I-D.ietf-grow-bmp-tlv-ebit].

# Proposal(RIB-IN)

- **Type = TBD16: (64-bit Gauge) Current Number of routes rejected by exceeding the length threshold of as-path.**
- **Type = TBD17: (64-bit Gauge) Current Number of routes in per-AFI/SAFI rejected by exceeding the length threshold of as-path.**
- **Type = TBD18: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-In-Post-Policy invalidated by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**
- **Type = TBD19: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-In-Post-Policy validated by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**

# Proposal(RIB-IN)

- **Type = TBD20: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-In-Post-Policy not found by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**

# Proposal(RIB-OUT)

- **Type = TBD21: (64-bit Gauge) Current number of routes in per-AFI/SAFI rejected by outbound policy.**
- **Type = TBD22: (64-bit Gauge) Current Number of routes refused to be sent by exceeding the length threshold of as-path.**
- **Type = TBD23: (64-bit Gauge) Current Number of routes in per-AFI/SAFI refused to be sent by exceeding the length threshold of as-path.**
- **Type = TBD24: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-Out-Post-Policy invalidated by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**

# Proposal(RIB-OUT)

- **Type = TBD25: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-Out-Post-Policy validated by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**
- **Type = TBD26: (64-bit Gauge) Current Number of routes in per-AFI/SAFI Adj-RIBs-Out-Post-Policy not found by verifying route origin Autonomous System (AS) number through the Route Origin Authorization (ROA) of Resource Public Key Infrastructure (RPKI).**



# Next

- **Asking for comments and feedbacks.**
- **Welcome to have exchanges on the mailing list.**

Thank You